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# Mössbauer Effect Studies of Iron in Kaolin. I. Structural Iron

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**Abstract:** <sup>57</sup>Fe Mössbauer spectra of a cleaned Weipa, Australia, kaolin showed that a considerable fraction of the structural iron exhibits paramagnetic relaxation between 4° K and 300° K the first time that this has been observed for ferric ions in a mineral. The sample also contained a very fine particle ferric oxide/oxyhydroxide phase, probably of secondary origin.

**Key Words:** Iron • Kaolinite • Mössbauer effect • Paramagnetism • Structural substitution

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